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AN 129:164740 HCA
TI **Copper** alloy articles having improved blanking workability for electric and electronic devices and their manufacture
IN Eguchi, Tatsuhiko; Hirai, Takao; Kojima, Manabu
PA Furukawa Electric Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 17 pp.
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PI	JP 10195562	A2	19980728	JP 1997-1802	19970109

AB The **Cu** alloy articles contain 0.002-0.5% of **Pb**, Bi, Ca, Sr, Ba, and/or Te. The following alloy articles contg. 0.002-0.5% of **Pb**, Bi, Ca, Sr, Ba, and/or Te are also claimed: (1) **Cu**-Zn alloys, (2) **Cu**-Zr alloys having Zr content 0.02-0.2%, (3) **Cu**-Sn alloys, (4) **Cu**-Sn-Ni alloys, (5) **Cu**-Sn-Ni-P alloys contg. Sn 1.5-2.5, Ni 0.1-0.3, and P .ltoreq.0.15%, (6) **Cu**-Fe alloys, (7) **Cu**-Fe-P alloys having Fe content 0.02-0.5% and P content 0.01-0.2%, (8) **Cu**-Fe-Zn-P alloys contg. Fe 1.0-2.6, Zn 0.05-2.0, and P 0.015-0.15%, (9) **Cu**-Cr alloys, or (10) **Cu**-Cr-Zr alloys. The title articles are manufd. by **casting**, hot-working, and cold-working the alloys having the above compns. at the following conditions: (a) cooling rate in **casting** .gtoreq.5.degree./s, (b) hot-working at 700-1000.degree., (c) rapid-cooling after hot-working at rate .gtoreq.10.degree./s, and (d) **heating** at 300-600.degree. for 30 s to 6 h during cold-working. The microalloying elements form compds. dispersed in the **Cu** matrixes, resulting in improved workability in blanking of the alloy articles.